# 3442 TG-PB10



US Model AEP Model UK Model E Model

STEREO CASSETTE PLAYER

#### **SPECIFICATIONS**

CASSETTE PLAYER

Playback System: 4-track 2-channel stereo

Fast-forward and

Rewind Time: Approx. 90 sec. (with C-60 cassette)

Playback Signal-to-

noise Ratio: • With TYPE IV cassette (Sony METALLIC)

60 dB at peak level . . . US model

60 dB at peak level (NAB)

60 dB (DIN)

AEP, E, UK model

Frequency Response:

• With TYPE IV cassette (Sony METALLIC)

20 – 18,000 Hz

30 - 16,000 Hz (±3 dB)

• With TYPE I cassette (Sony HFX) . . . US model

(Sony BHF) ... AEP, UK, E model

20 - 17.000 Hz

30 - 15,000 Hz (± 3 dB)

Wow and Flutter: 0.05 % WRMS . . . US model

0.05 % WRMS (NAB)

± 0.14 % (DIN)

AEP, UK, E model

Tape Transport Mechanism Type

TCM-110V5

SAFETY-RELATED COMPONENT, WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

Power Output: US model

12 W + 12 W (70 Hz - 20,000 Hz,

leheld EU

1 % harmonic distortion)

AEP, UK, E model

25 W + 25 W (Music)

50 W + 50 W (Peak music) 14 W + 14 W (1 kHz, 1 % harmonic distortion)

Harmonic Distortion: 0.05 % (4 W + 4 W)

Inputs: Microphone input (phone jack)

Sensitivity 0.435 mV (-65 dB)

For a low-impedance microphone

AUX IN

Sensitivity 435 mV (-5 dB)

Input impedance 5  $k\Omega$ 

Outputs: Line outputs

Output level 250 mV (-10 dB) at load

impedance 50 k $\Omega$ 

Load impedance over 10  $k\Omega$ 

Headphone output

Output level 380 mV (-16 dB) at a load impedance of 8  $\Omega$  with the volume level

maximum

- Continued on page 2 -





GENERAL

Power Requirements:

US model: 120 V ac, 60 Hz

AEP model:

220 V ac, 50/60 Hz

(240 V ac adjustable by authorized

Sony personnel)

UK model:

240 V ac, 50/60 Hz

(220 V ac adjustable by authorized

Sony personnel)

110, 120, 220 or 240 V ac adjustable,

50/60 Hz

**Power Consumption:** 

**Dimensions:** 

Approx. 195 (w) x 255 (h) x 230 (d) mm

 $(7\frac{3}{4})$  (w) x  $10\frac{7}{8}$  (h) x  $9\frac{1}{8}$  (d) inches)

including projecting parts and controls

Weight:

Approx. 5.9 kg (13 lb) net

Approx. 9.5 kg (21 lb) in shipping carton

including speakers weight

SPEAKER

Speaker System:

2-way speaker system

Speaker Units:

Woofer: 10 cm, cone type Tweeter: 5 cm, cone type

Nominal Impedance:

**Power Handling** 

Capacity:

Nominal 20 W DIN 45500

Maximum 50 W DIN 45500

Sensitivity:

88 dB (1 W, 1 m) DIN 45500 60 Hz - 18,000 Hz +4 dB DIN

Frequency Range: Crossover Frequency:

Dimensions:

7,000 Hz

Approx. 125 (w) x 255 (h) x 205 (d) mm

 $(5 \text{ (w)} \times 10\frac{7}{8} \text{ (h)} \times 8\frac{1}{8} \text{ (d) inches)}$ 

MODEL IDENTIFICATION

- Specification Label -

**US Model** 

MODEL NO TC-PBIO

CASSETTE PLAYER STEREO

AC:120V

60Hz

SERIAL NO.

MADE IN JAPAN

3-579-502-01

**UK Model** 

MODEL NO TC-PBIO

CASSETTE PLAYER **STEREO** 

AC:240V ~ 50/60Hz 45W

SERIAL NO.

MADE IN JAPAN

3-579-506-01

**AEP Model** 

MODEL NO TC-PBIO

CASSETTE PLAYER STEREO

AC:220V ~ 50/60Hz 45W

SERIAL NO.

MADE IN JAPAN

3-579-505-01

E Model

MODEL NO TC-PBIO

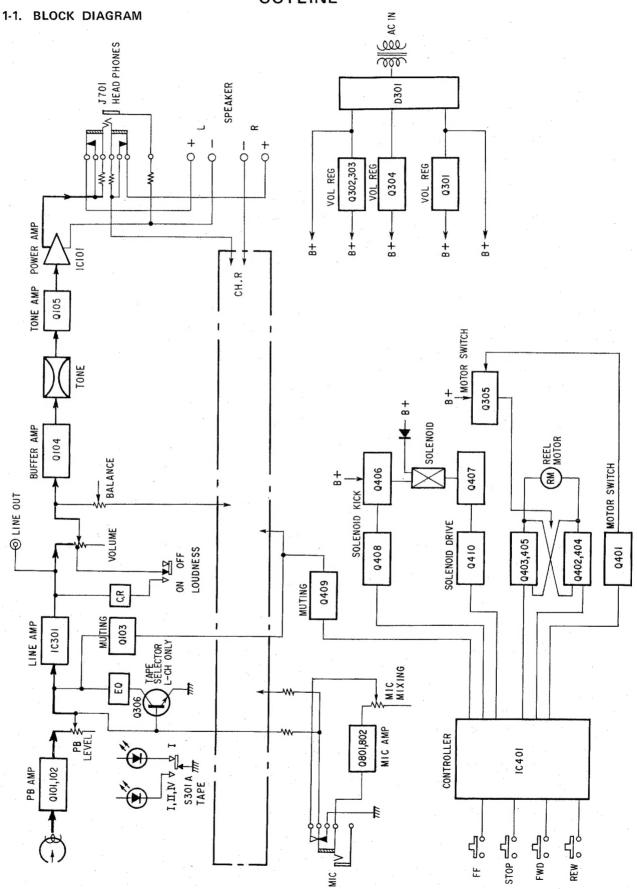
STEREO CASSETTE PLAYER AC:110,120,220,240V  $\sim$  50/60Hz 45W

SERIAL NO.

MADE IN JAPAN

3-579-504-01

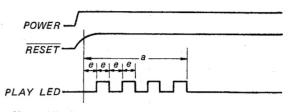
# SECTION 1 OUTLINE



#### 1-2. CIRCUIT DESCRIPTION

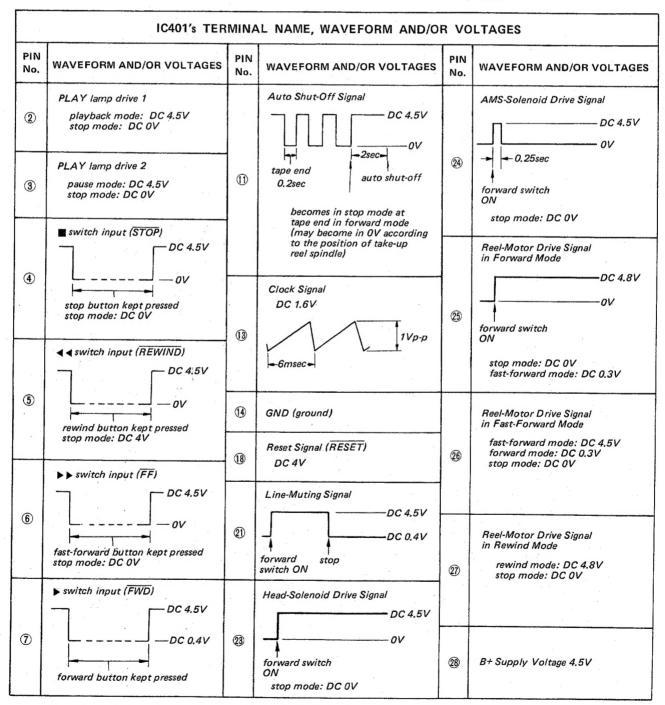
#### • When the POWER is Turned ON:

For four seconds after the POWER switch is turned ON (i.e., after RESET input signal became in "H"), the PLAY LED repeats going on and off in one-second repetition rate. The reset signal is effective during this four second period and the function-switch inputs are rejected, i.e., the set is in the stop mode.



Note: All other outputs: low state
a: 4S

a : 4S e : 0.5S



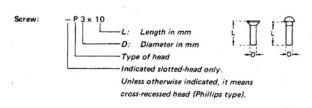
Note: A terminal with bar over its name operates when OV voltage is applied.

ex: RESET

## 1/4 WATT CARBON RESISTORS

Ω	Part No.	Ω	Part No.	Ω	Part No.	Ω	Part No.	Ω	Part No.	Ω	Part No.	Ω	Part No.
1.0	1-246-401-00	10	1-246-425-00	100	1-246-449-00	1.0k	1-246-473-00	10k	1-246-497-00	100k	1-246-521-00	1.0M	1-246-545-00
1.1	1-246-402-00	11	1-246-426-00	110	1-246-450-00	1.1k	1-246-474-00	11k	1-246-498-00	110k	1-246-522-00	1.1M	1-210-814-00
1.2	1-246-403-00	12	1-246-427-00	120	1-246-451-00	1.2k	1-246-475-00	12k	1-246-499-00	120k	1-246-523-00	1.2M	1-210-815-00
1.3	1-246-404-00	13	1-246-428-00	130	1-246-452-00	1.3k	1-246-476-00	13k	1-246-500-00	130k	1-246-524-00	1.3M	1-210-816-00
1.5	1-246-405-00	15	1-246-429-00	150	1-246-453-00	1.5k	1-246-477-00	15k	1-246-501-00	150k	1-246-525-00	1.5M	1-210-817-00
	1 040 400 00	16	1 046 420 00	160	1 046 454 00	1 63	1 046 478 00	100	1 046 500 00	1601	1 046 506 00	1 04	1 210 212 20
1.6	1-246-406-00	3	1-246-430-00			1	1-246-478-00	16k			1-246-526-00		1-210-818-00
1.8	1-246-407-00	18	1-246-431-00	180			1-246-479-00	18k	1-246-503-00	180k	1-246-527-00		1-210-819-00
2.0	1-246-408-00	20	1-246-432-00	200	1-246-456-00	1	1-246-480-00	20k	1-246-504-00	200k	1-246-528-00		1-210-820-00
2.2	1-246-409-00	22	1-246-433-00	220	1-246-457-00	2.2k	1-246-481-00	22k	1-246-505-00	220k	1-246-529-00	2.2M	1-210-821-00
2.4	1-246-410-00	24	1-246-434-00	240	1-246-458-00	2.4k	1-246-482-00	24k	1-246-506-00	240k	1-246-530-00	2.4M	1-244-754-00
2.7	1-246-411-00	27	1-246-435-00	270	1-246-459-00	2.7k	1-246-483-00	27k	1-246-507-00	270k	1-246-531-00	2.7M	1-244-755-00
3.0	1-246-412-00	30	1-246-436-00	300	1-246-460-00	3.0k	1-246-484-00	30k	1-246-508-00	300k	1-246-532-00	3.0M	1-244-756-00
3.3	1-246-413-00		1-246-437-00	330	1-246-461-00	3.3k	1-246-485-00	33k	1-246-509-00	330k	1-246-533-00	3.3M	1-244-757-00
3.6	1-246-414-00	36	1-246-438-00	360	1-246-462-00	3.6k	1-246-486-00	36k	1-246-510-00	360k	1-246-534-00	3.6M	1-244-758-00
3.9	1-246-415-00	39	1-246-439-00	390	1-246-463-00	3.9k	1-246-487-00	39k	1-246-511-00	390k	1-246-535-00	3.9M	1-244-759-00
4.3	1-246-416-00	43	1-246-440-00	430	1-246-464-00	4 31	1-246-488-00	43k	1-246-512-00	430k	1-246-536-00	4 3M	1-244-760-00
4.7	1-246-417-00		1-246-441-00	470	1-246-465-00	4.7k		47k	1-246-513-00	470k	1-246-537-00		1-244-761-00
5.1	1-246-418-00		1-246-442-00	510	1-246-466-00		1-246-490-00	51k	1-246-514-00	510k	1-246-538-00		1-244-762-00
5.6	1-246-419-00	56	1-246-443-00	560						560k		J. 11VI	1 244 702 00
							1-246-491-00	56k	1-246-515-00				
6.2	1-246-420-00	62	1-246-444-00	620	1-246-468-00	6.2k	1-246-492-00	62k	1-246-516-00	620k	1-246-540-00		
6.8	1-246-421-00	68	1-246-445-00	680	1-246-469-00	6.8k	1-246-493-00	68k	1-246-517-00	680k	1-246-541-00		
7.5	1-246-422-00	75	1-246-446-00	750	1-246-470-00	7.5k	1-246-494-00	75k	1-246-518-00	750k	1-246-542-00		
8.2	1-246-423-00	.82	1-246-447-00	820	1-246-471-00	8.2k	1-246-495-00	82k	1-246-519-00	820k	1-246-543-00		
9.1	1-246-424-00	91	1-246-448-00	910	1-246-472-00	9.1k	1-246-496-00	91k	1-246-520-00	910k	1-246-544-00		

#### HARDWARE NOMENCLATURE



Reference Designation	Shape	Description	Remarks
		SCREWS	·
P	8≡	pan-head screw	binding-head (B) screw for replacement
PWH	<b>(</b>	pan-head screw with washer face	binding-head (B) screw and flat washer for replacement
PS PSP	85	pan-head screw with spring washer	binding-head (B) screw and spring washer for replace- ment
PSW PSPW	<b>9%</b> P	pan-head screw with spring and flat washers	binding-head (B) screw and spring and flat washers for replacement
R	₽	round-head screw	binding-head (B) screw for replacement
к	Ð	flat-countersunk-head screw	
RK	₽	oval-countersunk-head screw	
В	þ	binding-head screw	
T	<del>(</del>	truss-head screw	binding-head (B) screw for replacement
F	₽∋	flat-fillister-head screw	1
RF	€⊒	fillister-head screw	
BV	<del>(</del> D-	braizer-head screw	1

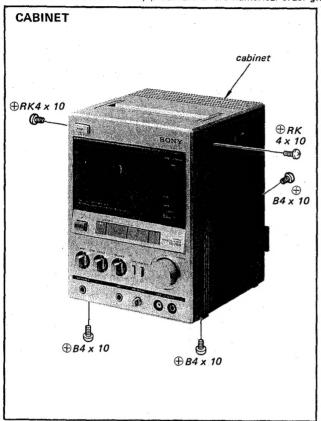
Nut, Washer,	Retaining ring:
	N 3  Diameter of usable screw or shaft
	Reference designation

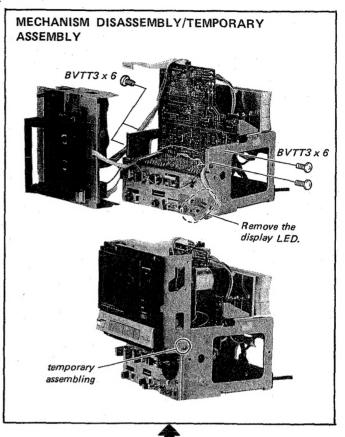
Reference Designation	Shape	Description	Remarks
		SELF-TAPPING SCRE	ws
TA	(H)	self-tapping screw	ex: TA, P 3 x 10
PTP	<b>=</b>	pan-head self-tapping screw	binding-head self- tapping (TA, B) screw for replacement
PTPWH	<b>=</b>	pan-head self-tapping screw with washer face	binding-head self tapping (TA, B) screw and flat washer for replacement
PTTWH		pan-head thread-rolling screw with washer face	binding-head (B) screw and flat washer for replacement
		SET SCREWS	
SC	-	set screw	
SC	-0€3-	hexagon-socket set screw	ex: SC 2.6 x 4, hexagon socket
		NUT	
Ν .	-[]-🐵-	nut :	
		WASHERS	•
W	0	flat washer	
sw		spring washer	
LW	0	internal-tooth lock washer	ex: LW3, internal
LW	0	external-tooth lock washer	ex: LW3, external
		RETAINING RINGS	
ε	0	retaining ring	
G	@	grip-type retaining ring	

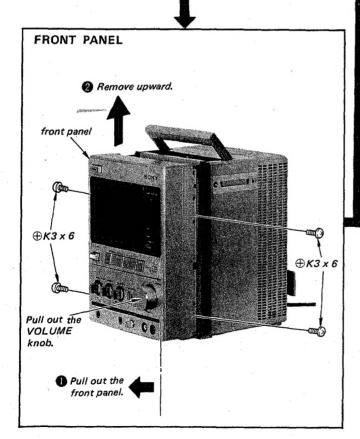
## TC-PB10

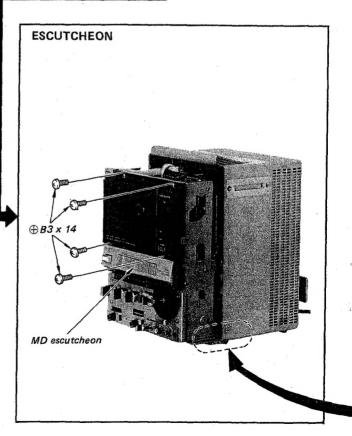
## SECTION 2 DISASSEMBLY

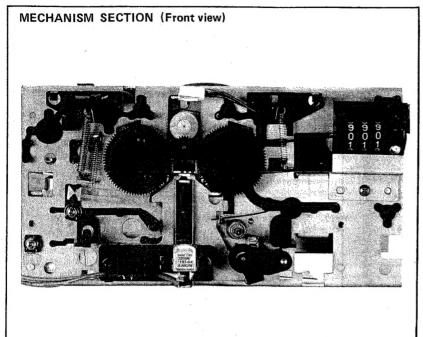
Note: Follow the disassembly procedure in the numerical order given.

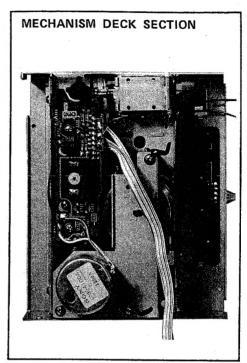


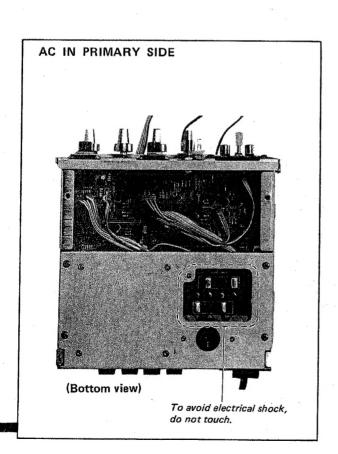


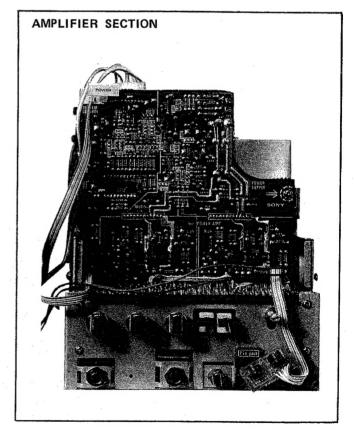












# SECTION 3 ADJUSTMENTS

#### 3-1. MECHANICAL ADJUSTMENTS

#### **PRECAUTION**

1. Clean the following parts with a denaturedalcohol-moistened swab:

record/playback head pinch roller erase head rubber belts capstan idlers

2. Demagnetize the playback head with a head demagnetizer.

3. Do not use a magnetized screwdriver for the adjustments.

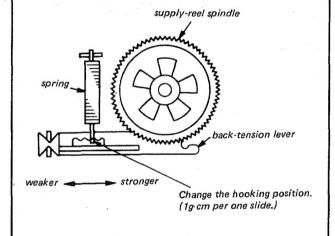
4. After the adjustments, apply suitable locking compound to the parts adjusted.

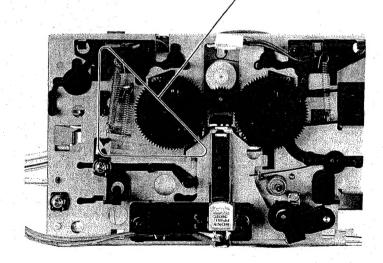
 The adjustments should be performed with the rated power supply voltage unless otherwise noted.

# Torque Measurement and Back Tension Torque Adjustment

1.	Torque	Torque meter	Meter reading
	Forward	CQ-102C	30-60 g·cm (0.42-0.83 oz·inch)
	Fast forward, Rewind	CQ-201A	110-165 g·cm (1.53-2.2 oz·inch)
	Back tension	CQ-102C	2.5-4.5 g·cm (0.04-0.06 oz·inch)

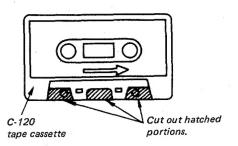
2. If the specified back-tension torque is not obtained, change the hooking position of the spring.



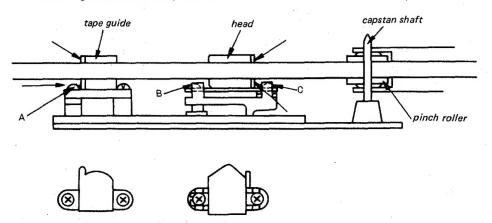


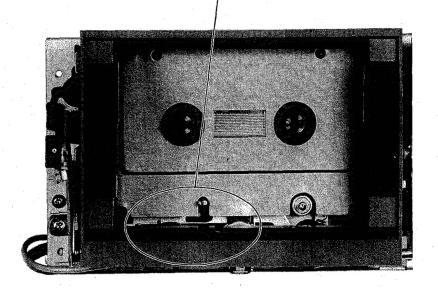
#### Head Height Adjustment

1. Prepare an adjustment cassette as shown below.



2. In playback mode and viewing from the front, adjust the head heights by using the adjustment screw A, B, C, to eliminate tape curl and tape twist at portions shown by arrow.





#### 3-2. ELECTRICAL ADJUSTMENTS

Note: The adjustment should be performed in the order given in this service manual. The adjustments should be performed for both L-CH and R-CH.

 Set the TAPE switches according to the tape as follows.

Tape	TAPE switch	
CS-10	TYPE I	
CS-20	TYPE II	
CS-30	TYPE III	
CS-40	TYPE IV	

• Switches and controls should be set as follows unless otherwise specified.

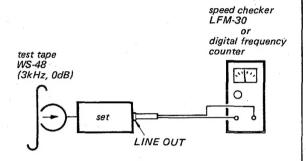
#### Standard Output Level

	PHONES	LINE OUT	
load impedance	8Ω	47kΩ	
output level	39mV (-26dB)	0.44V (-5dB)	

#### Capstan Motor Speed Adjustment

#### Procedure:

Mode: playback

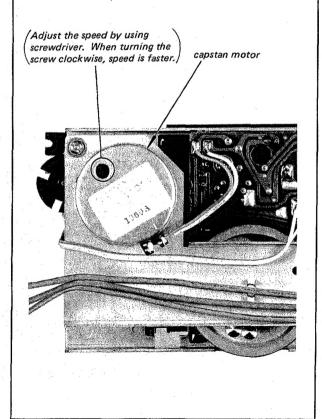


#### Specification:

Speed checker	Digital frequency counter
-0.3 <b>~</b> +0.3%	$2,990 \sim 3,010 Hz$

Frequency difference between the beginning and the end of the tape should be within 1% (30Hz).

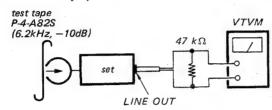
#### Adjustment Location:



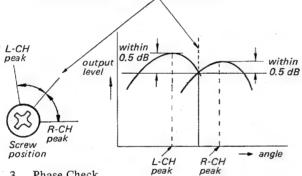
## Record/playback Head Azimuth Adjustment

#### Procedure:

Mode: playback

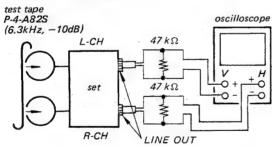


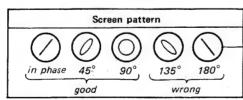
Turn the adjustment screw for the maximum output levels. If these levels do not match, turn the adjustment screw where both of output levels match together within 0.5 dB.



Phase Check

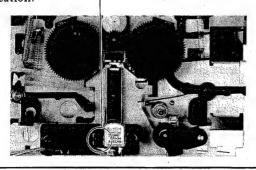
Mode: playback





Adjustment Location:

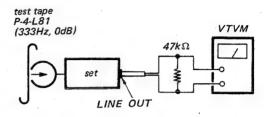
adjustment screw



#### Playback Level Adjustment

#### Procedure:

Mode: playback



#### Specification:

LINE OUT level:  $0.52 \sim 0.59V$ 

 $(-3.5 \sim -2.5 dB)$ 

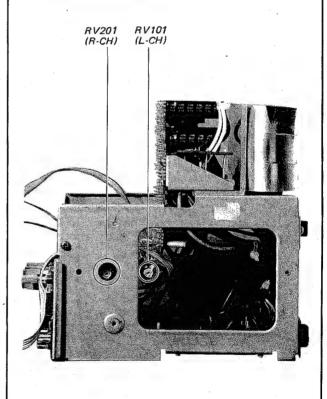
Level difference between channels:

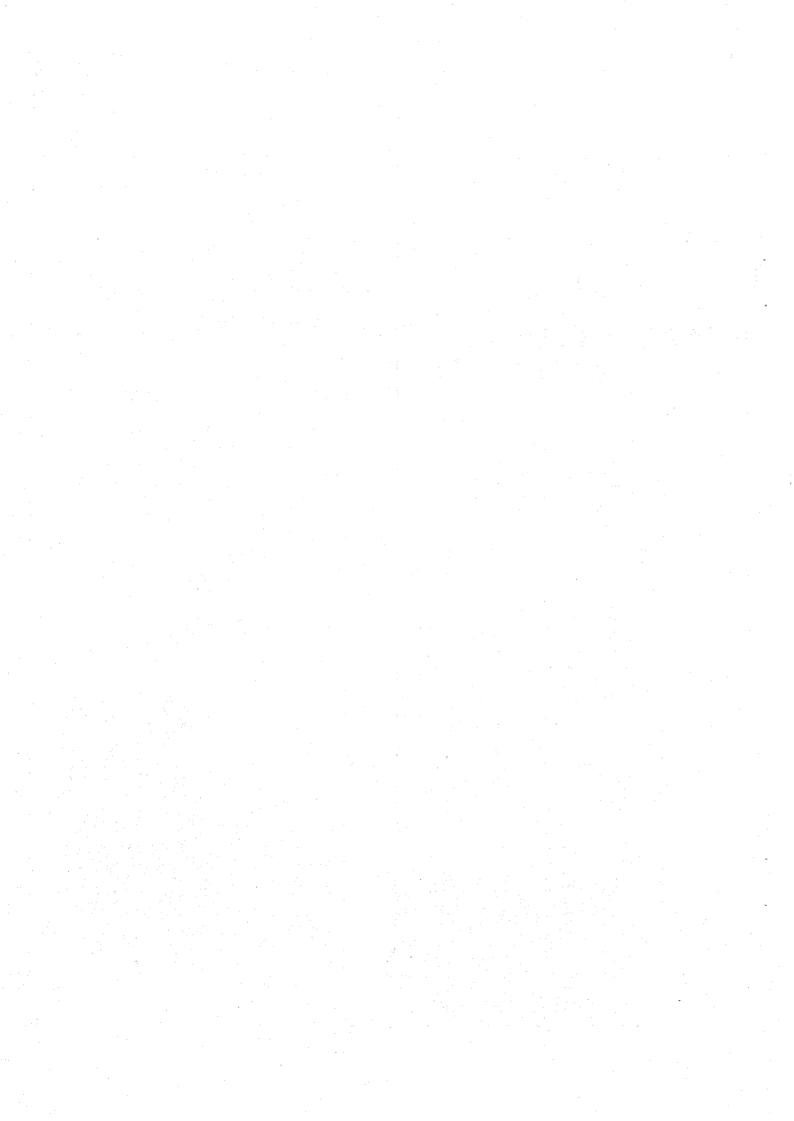
less than 0.5dB

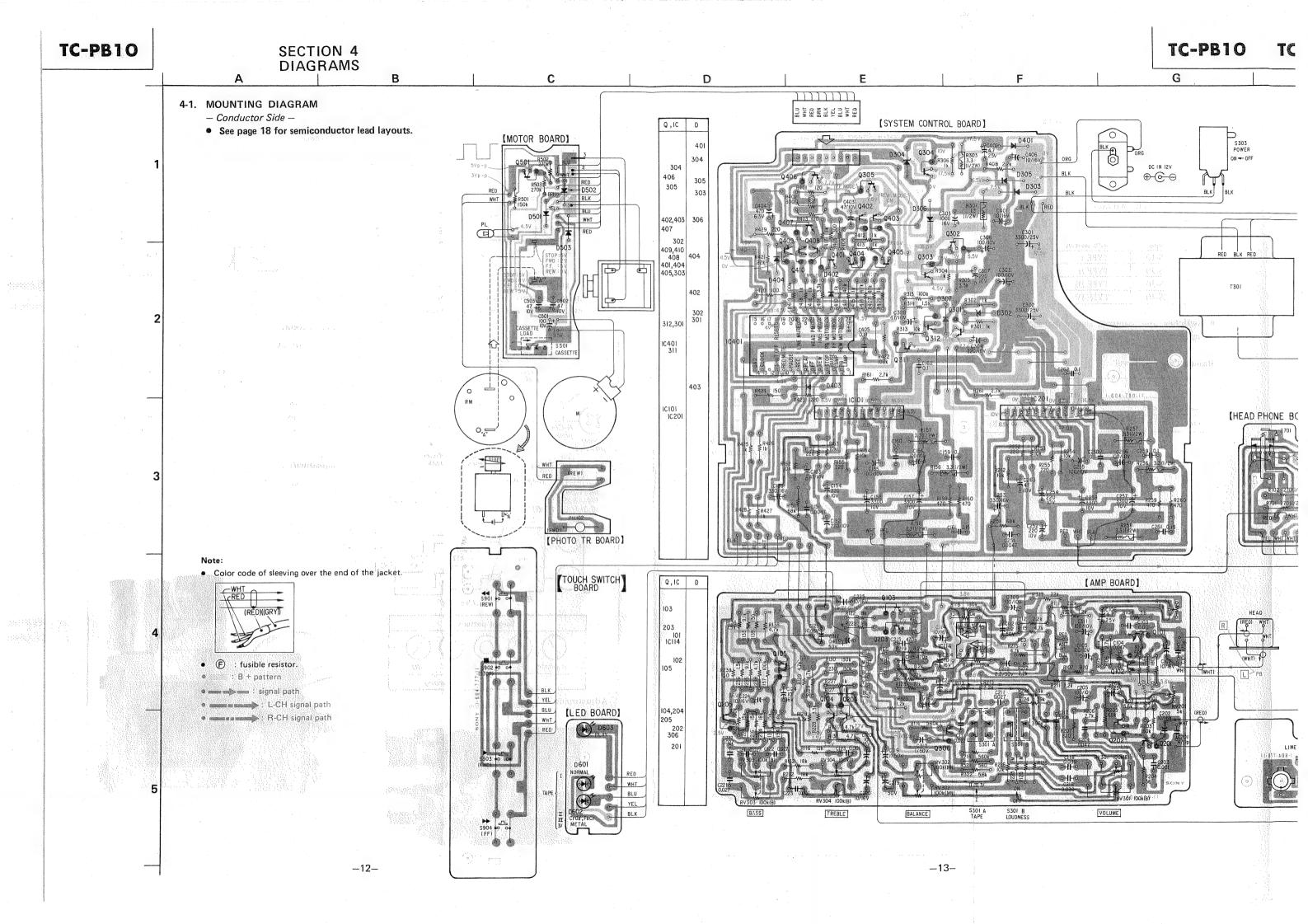
Check that the LINE OUT level does not change in playback mode while changing the mode from playback to stop several times.

#### Adjustment Location:

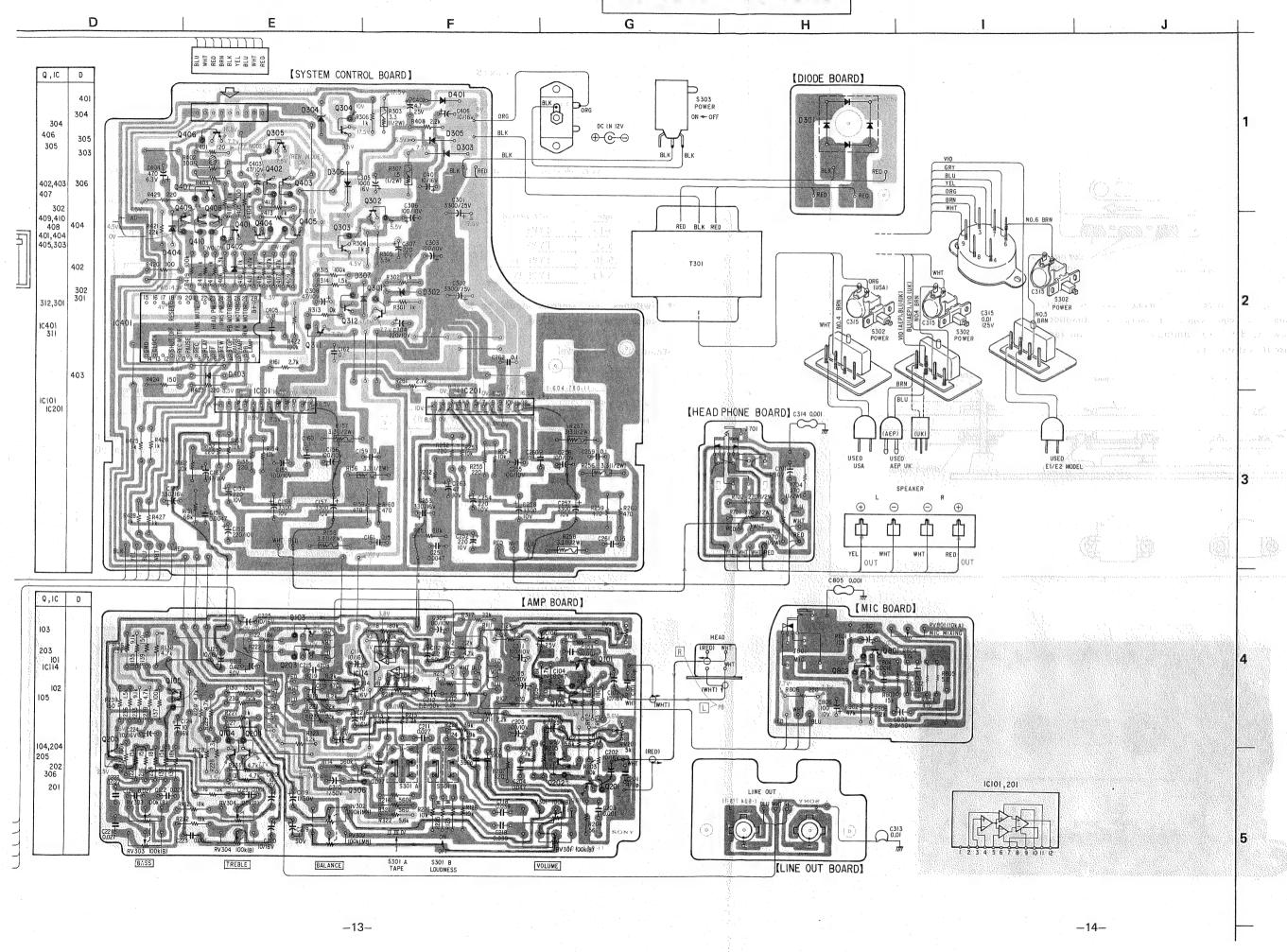
- record/playback board -

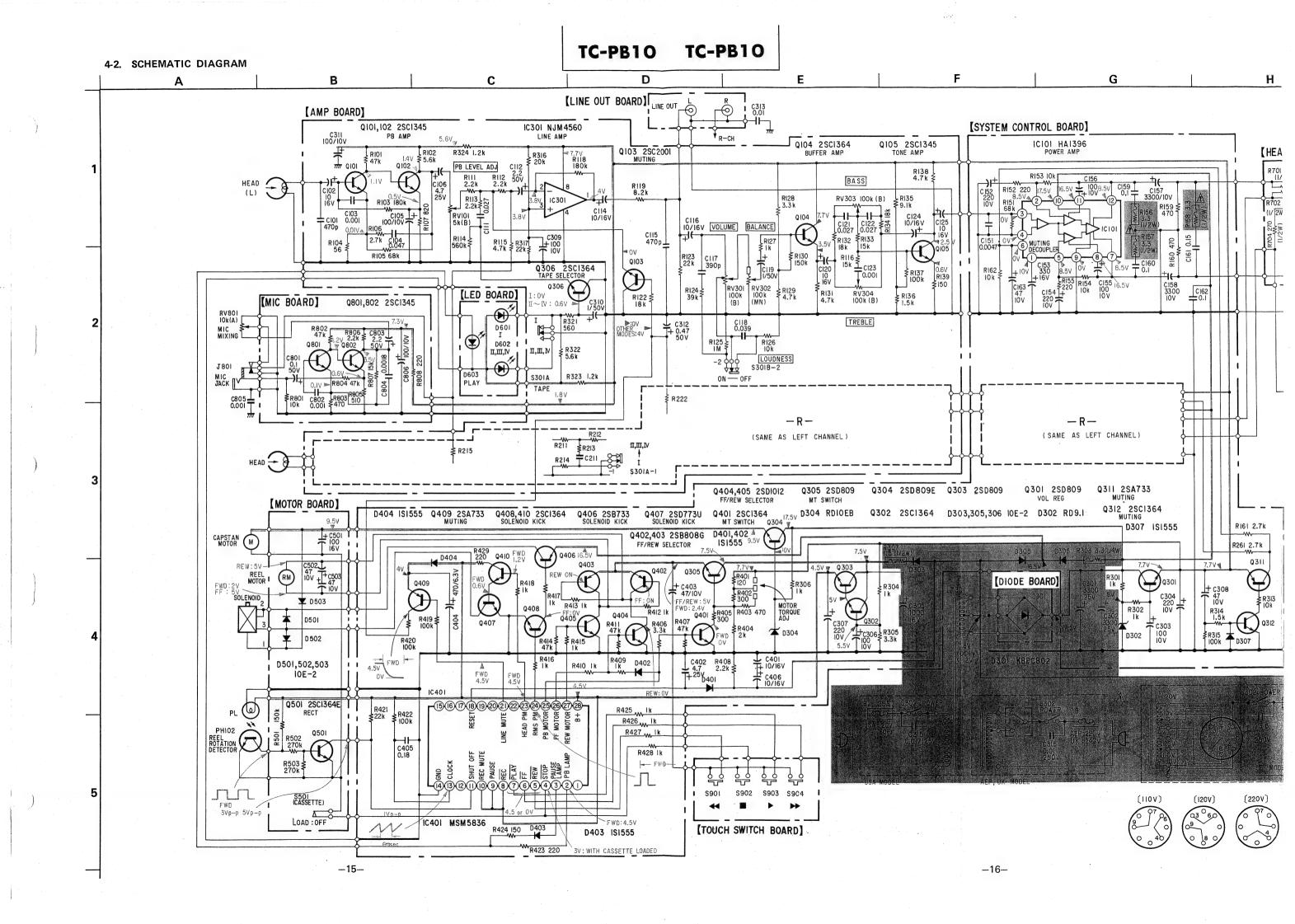




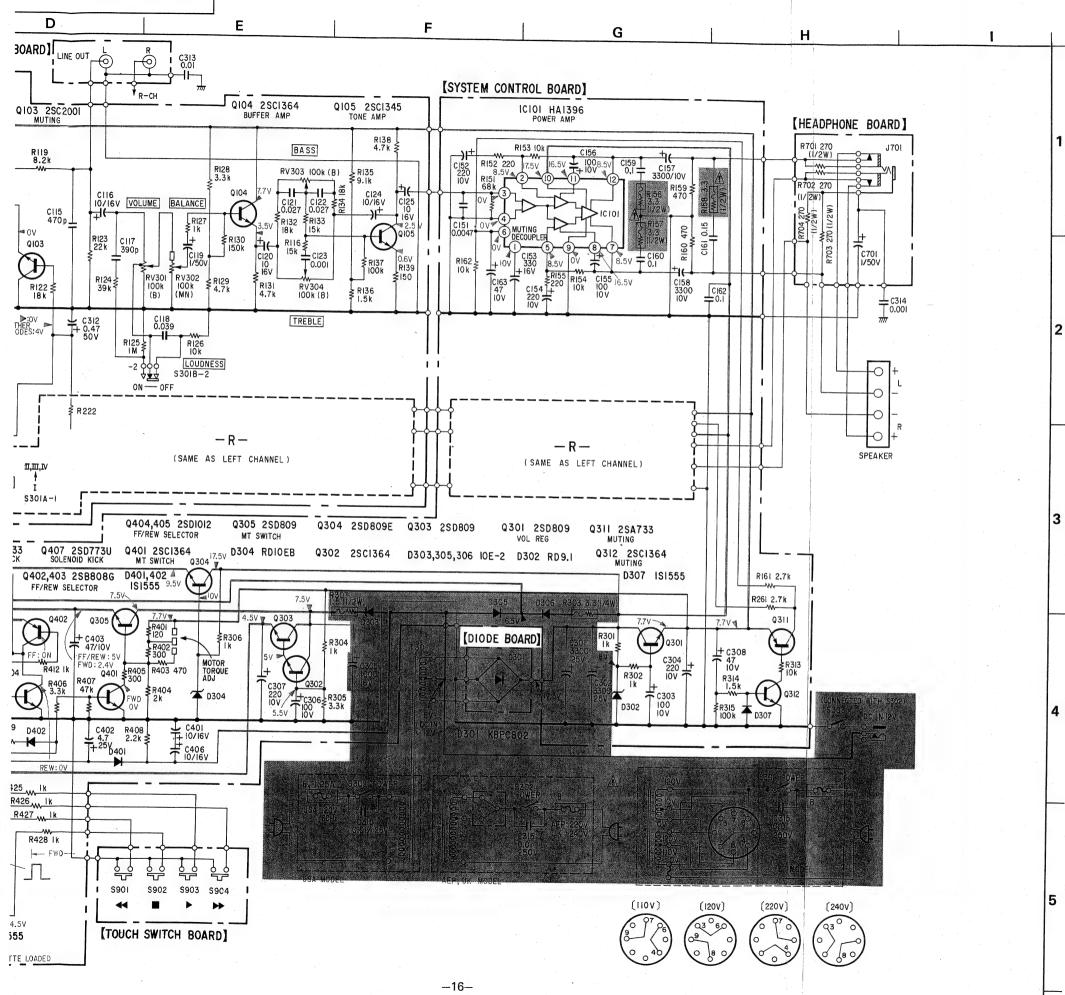


## TC-PB10 TC-PB10





## B10 TC-PB10



#### Note:

- Components for right channel have same values as for left channel. Reference numbers are coded from 200.
- All capacitors are in μF unless otherwise noted. pF = μμF
   50WV or less are not indicated except for electrolytics.
- All resistors are in ohms, %W unless otherwise noted.  $k\Omega:1000\Omega,M\Omega:1000k\Omega$
- fusible resistor.
- ---- : B+ bus.
- Readings are taken under no-signal conditions,
- Voltage variations may be noted due to normal production tolerances.
- Voltages are dc with respect to ground unless otherwise noted.
- Switch

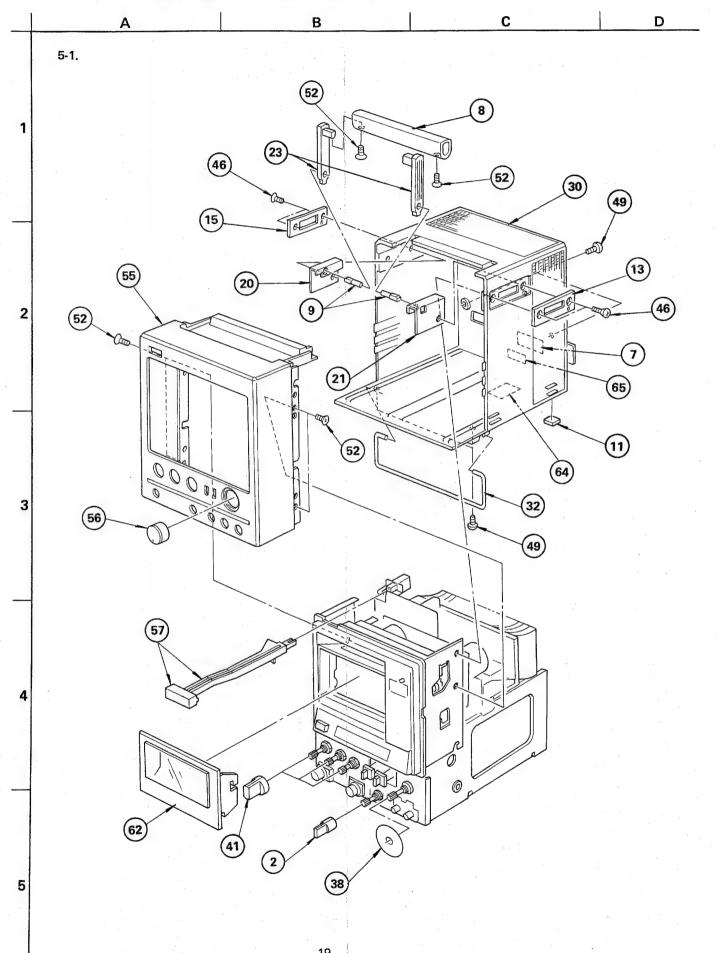
Ref. No.	Description	Position
S301	TAPE	TAPE I/LOUDNESS OFF
\$302	POWER	
S303	(DC POWER SW)	
S501	(CASSETTE)	
S901	REW	OFF
S902	STOP	OFF
S903	FWD	OFF
S904	FF	OFF

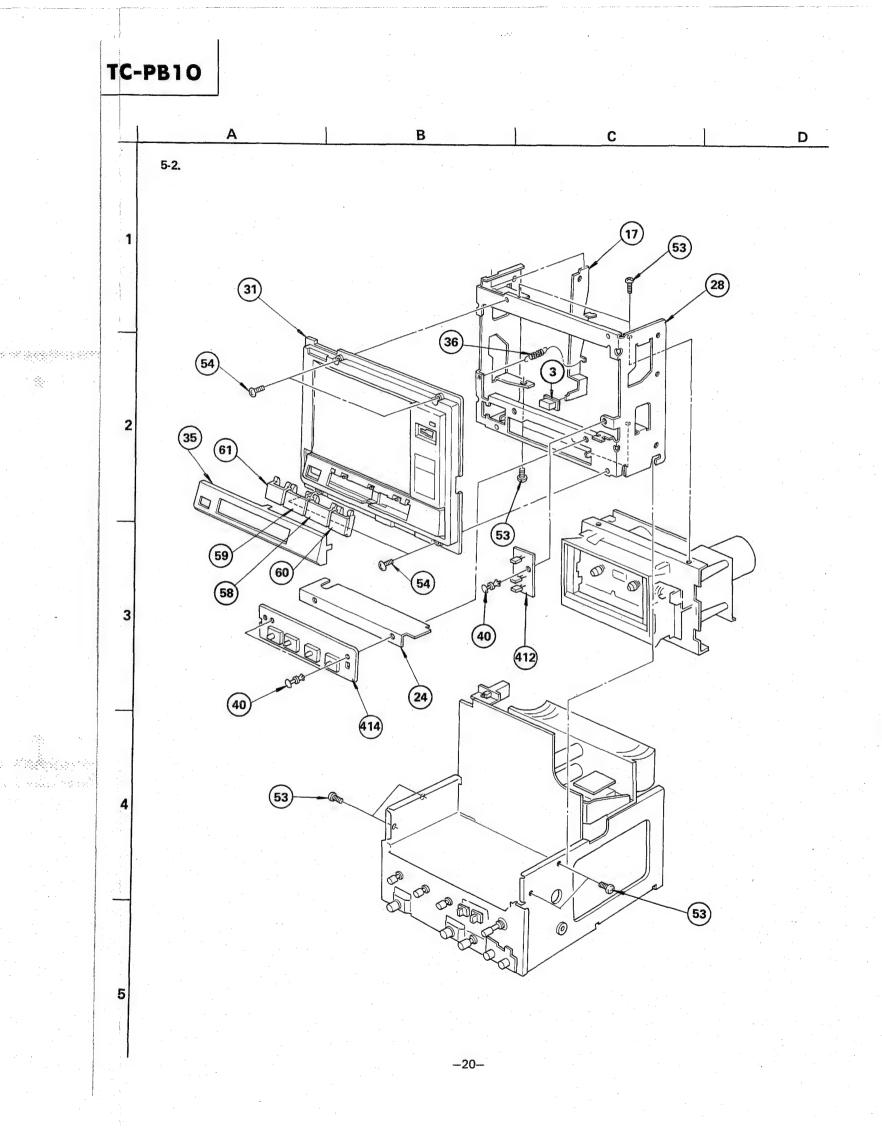
Note: Voltages are measured with a VOM (50k $\Omega$ /V).

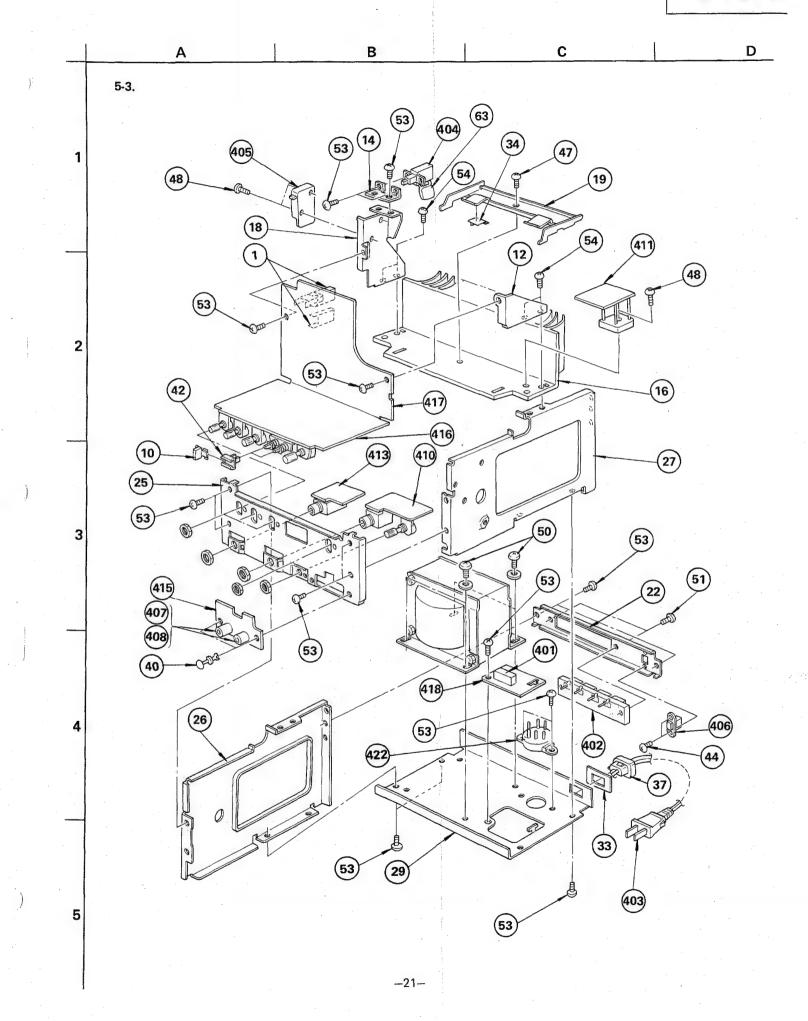
# SECTION 5 EXPLODED VIEWS AND PARTS LIST

## SEMICONDUCTOR LEAD LAYOUTS

		•
2SA733 2SA1027R	2SD809	NJM4560D
E C B	E C B	(Top view)
2SB733 2SD773	2SD1012	1S1555 10E2 RD9.1EB
E C B	E B C	RD10EB
2SB808	PH102	anode anode
	C J	GL9NG2 GL9PR20
B C E	HA1396	
2SC945 2SC1364		cathode
	12 n	KPC802
ВĊÈ	<b>MSM5836</b> 16 9	
2SC1345 2SC2001		
E C B	1 8 (Top view)	



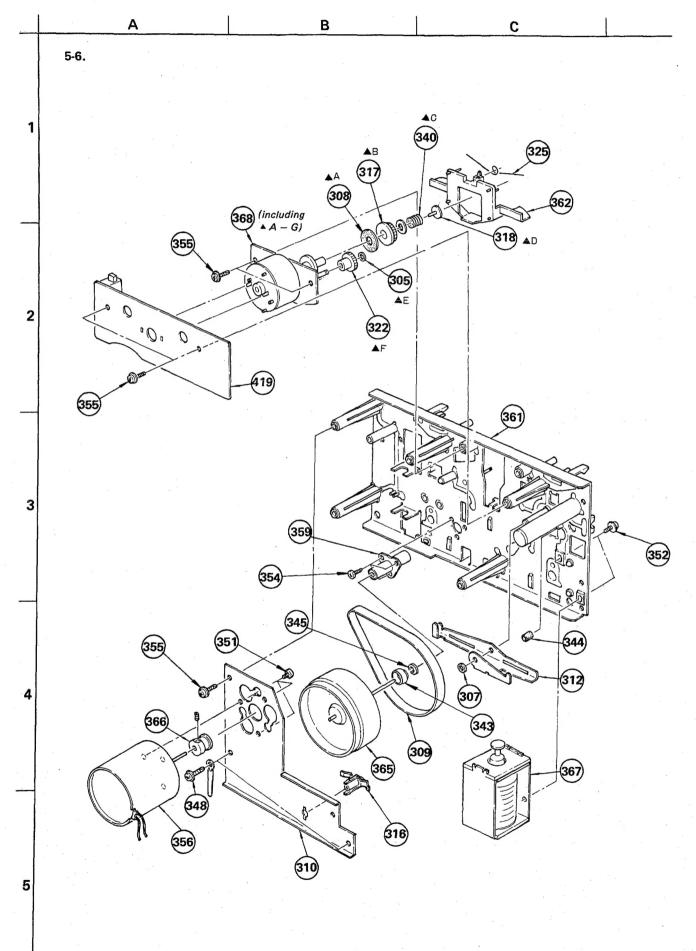




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TC-PB10

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## GENERAL SECTION

No.	Part No.	Description
1 2 3 4 5		HEAT SINK (35) KNOB, BIAS BUTTON, EJECT
6 7 7 7	3-579-502-00 3-579-504-00 3-579-505-00	LABEL, MODEL NUMBER(US) LABEL, MODEL NUMBER(E) LABEL, MODEL NUMBER(AEP)
7 8 9 10	3-579-506-00 3-579-507-00 3-579-508-00 3-579-512-00	LABEL, MODEL NUMBER(UK) HANDLE STOPPER, HANDLE BUTTON, FUNCTION
11 12 13 14 15	3-579-516-00 4;3-579-517-00 3-579-518-00 4;3-579-519-00 3-579-520-00	FOOT RETAINER (R), PC BOARD RETAINER (R), SPEAKER BRACKET, SWITCH, POWER RETAINER (L), SPEAKER
17 18 19	<b>6</b> ;3-579-525-00 <b>6</b> ;3-579-526-00 <b>6</b> ;3-579-527-00 <b>6</b> ;3-579-528-00 <b>6</b> ;3-579-529-00	HEAT SINK LEVER, EJECT RETAINER (L), PC BOARD RETAINER, IC RETAINER (L), HANDLE
22 23 24	\$;3-579-530-00 \$;3-579-531-00 3-579-532-00 \$;3-579-533-11 \$;3-579-533-01 \$;3-579-535-00	RETAINER (R), HANDLE BRACKET, TERMINAL, SPEAKER PLATE, SIDE, HANDLE COVER, MD(US) COVER, MD(E,AEP,UK) CHASSIS, FRONT
27 28	<b>♦</b> ; 3-579-538-00 <b>♦</b> ; 3-579-539-00 3-579-540-01	CHASSIS (L), SIDE CHASSIS (R), SIDE CHASSIS, MD CHASSIS, POWER CABINET(US, AEP, UK) CABINET(E)
	3-579-541-00 3-579-543-00 \$;3-579-544-00 \$;3-579-545-00 3-579-546-00	ESCUTCHEON, MD FOOT, ADJUSTMENT PLATE, BLIND PLATE, GROUND, IC PLATE, ORNAMENTAL, MD BUTTON
36 37 38 39 40	3-831-441-XX	SPRING, TENSION BUSHING, CORD CLOTH, BLIND RIVET NYLON, 3.5

#### GENERAL SECTION

No.	Part No.	Description
41 42		KNOB, POWER JOINT (B), KNOB
43 44 45		SCREW +P 2X5
47 48 49	7-682-362-04 7-682-548-09 4;7-682-551-09 7-682-562-04 7-682-961-01	SCREW +B 4X10
51 52 53 54 55	7-685-347-14 7-685-871-01 7-685-872-01	SCREW +RKTP 3X10 TYPE2 N-S SCREW +BVTT 3X6 (S) SCREW +BVTT 3X8 (S)
56 57 58 59 60	X-3579-504-0 X-3579-505-0	BUTTON ASSY, FWD BUTTON ASSY, STOP
62 63 64		WINDOW ASSY, CASSETTE COVER, CAP(AEP,UK) LABEL, CAUTION, MAIN(US)

#### ACCESSORY & PACKING MATERIAL

		0112110 11112712710
No.	Part No.	Description
Â	3-701-630-00 X-3701-105-0 ,1-526-565-12 3-579-548-00 3-579-550-00	BAG, POLYETHYLENE ROD ASSY, CLEANING, HEAD PLUG ADAPTER(E) CARTON CUSHION, UPPER
-	3-579-551-00 3-579-547-00 3-783-600-11 3-783-600-21 3-795-226-21	CUSHION, LOWER SHEET MANUAL, INSTRUCTION(AEP,UK,E) MANUAL, INSTRUCTION(US) CARD, CUSTOMER INQUIRING(US)

- NOTE: Items with no part number and no des-cription are not stocked because they are seldom required for routine service.
- · Items marked " " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Due to standardization, parts with part numbers ( $\Delta-\Delta\Delta\Delta-\Delta\Delta\Delta-XX$  or  $\Delta-\Delta\Delta\Delta\Delta-\Delta\Delta\Delta-X$ ) may be different from those used in the

- CAPACITORS:
  All capacitors are in μF. Common capacitors are omitted. Refer to the following lists for their part numbers. MF:μF, PF:μμF.
- RESISTORS

All resistors are in ohms. Common 1/4W, 1/8W and 1/16W carbon resistors are omitted. Refer to the following lists for their part numbers.

· F : nonflammable

The components identified by shading and mark A are critical for safety.

Replace only with part number specified.

COILS

· ММН : mH, UH : µН

## TC-PB10

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#### MECHANISM SECTION

No.	Part No.	Description
301 302 303 304 305	3-530-181-XX 3-555-113-00 3-555-114-00	SPRING, COMPRESSION BELT, DETECTING SPRING (R) SPRING (L) WASHER, STOPPER
306 307 308 309 310	3-558-708-21 3-564-027-11 3-564-319-00	WASHER, STOPPER WASHER, STOPPER FELT, LIMITER BELT, CAPSTAN RETAINER, THRUST
311 312 313 314 315	<b>♦</b> ;3-575-312-00 <b>♦</b> ;3-575-314-00	LEVER, FWD SPRING LEVER, FULCRUM, HOLDER BASE, ADJUSTMENT, HEAD
316 317 318 319 320	3-575-324-00 3-575-327-00 3-575-328-00	RETAINER, THRUST, CAPSTAN GEAR, LIMITER STOPPER HOLDER, LAMP BRACKET, HEAD
321 322 323 324 325	<b>♦</b> ;3-575-334 <b>-</b> 00	LEVER, DETECTION, HALF GEAR, FR PISTON LEVER, DETECTION, REC SPRING
326 327 328 329 330	3-575-351-00	ROLLER, GUIDE, THREADING PULLEY, CB CLAW, REEL TABLE SPRING TABLE, REEL
331 332 333 334 335		LEVER, LOCK HOLDER, CASSETTE SPRING SPRING, TENSION SPRING, TENSION
336 337 338 339 340	3-575-360-00 3-575-364-00 3-575-365-00	SPRING, TENSION RING, 0 SPRING, TENSION SPRING, COMPRESSION SPRING, COMPRESSION
341 342 343 344 345	3-575-383-00 <b>4</b> ;3-575-395-00 3-576-734-00 3-652-612-11 3-701-438-21	CHASSIS, HEAD BRACKET, COUNTER WASHER, CAPSTAN CUSHION (B) WASHER

#### MECHANISM SECTION

No.	Part No.	Description
348 349	3-701-439-21 0-489-436-00 7-621-259-15 7-621-772-70 7-621-775-10	WASHER COUNTER SCREW +P 2.6X3 SCREW +B 2X14 SCREW +B 2.6X4
352 353 354	7-685-534-29 7-685-861-01	BALL, STEEL SCREW +PSW 3X10 SCREW +BTP 2.6X8 TYPE2 N-S SCREW +BVTT 2.6X5 (S) SCREW,TOTSU PTPWH 3X8,TYPE2
357 358 359	X-3575-302-0 X-3575-303-0	MOTOR, DC (DNE-4100A) PLATE (A) ASSY, HOLDER FULCRUM PLATE (B) ASSY, HOLDER FULCRUM METAL ASSY, CAPSTAN PINCH LEVER (T) ASSY
362 363 364	X-3575-309-0 X-3575-310-0 X-3575-314-0	CHASSIS ASSY, MECHANISM PLATE ASSY, BRAKE LEVER ASSY, TENSION, BACK PLATE ASSY, ORNAMENTAL FLYWHEEL (D) ASSY
367	X-3575-329-0	PULLEY, MOTOR SOLENOID ASSY MOTOR ASSY, REEL

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Due to standardization, parts with part numbers ( $\Delta - \Delta \Delta \Delta - \Delta \Delta \Delta - XX$  or  $\Delta - \Delta \Delta \Delta - \Delta \Delta \Delta - X$ ) may be different from those used in the set.

CAPACITORS:
All capacitors are in μF. Common capacitors are omitted. Refer to the following lists for their part numbers. MF:μF, PF:μμF.

RESISTORS
All resistors are in ohms. Common 1/4W, 1/8W and 1/16W carbon resistors are omitted. Refer to the following lists for their part numbers.

• F : nonflammable

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

#### COILS

· MMH : mH, UH : μΗ

#### TC-PB10 TC-PB10

#### ELECTRICAL PARTS

Ref.No. Part No. Description	ļ	Ref.No.	<u>.</u> .
401 A.1-532-519+00 BREAKER, CIRCUIT(US) 401 A.1-532-539-00 BREAKER, CIRCUIT(AEP,UK) 401 A.1-532-541-00 BREAKER, CIRCUIT(E)		D602 D603	
403 A.1-534-986-XX CORD, POWER(US) 403 A.1-534-817-XX CORD, POWER(AEP) 403 A.1-551-473-32 CORD, POWER(E)		IC101 IC201 IC301 IC401	L 8
4U3 <u>М</u> .1-551-963-00 CORD, POWER(UK)		J701 J801	:
406 A.1=507-447-XX JACK, EXT, POWER SUPPLY 407 1-507-567-31 JACK, PIN 1P (LINE OUT L) 408 1-507-567-41 JACK, PIN 1P (LINE OUT R) 409 1-1603-232-00 PC POWER PURPLY	M.	PL	1
408 1-507-567-41 JACK, PIN 1P (LINE OUT R) 409 4:1-603-823-00 PC BOARD, PHOTO 410 4:1-604-773-00 PC BOARD, MIC		Q101 Q102 Q103	8
411 •;1-604-774-00 PC BOARD, RECTIFICATION 412 •;1-604-775-00 PC BOARD, LED 413 •:1-604-776-00 PC BOARD HEADBHONE		Q104 Q105	8
414 4;1-604-777-00 PC BOARD, TACT SWITCH 415 4;1-604-778-00 PC BOARD, PIN JACK		0201 0202 0203 0204 0205	888888
416	-	0301 0302 0303 0304	8 8 8
421 8-829-373-50 HEAD, REC/PB (PP181-3602E) 422 Δ.1-526-576-00 SELECTOR, VOLT(Ε)	ME	Q305 Q306	8
C301 A.I-123-500-51 ELECT 3300MF 20% 25V C302 A.I-123-500-51 ELECT 3300MF 20% 25V C305 A.I-123-488-00 ELECT 1000MF 20% 16V C315 A.I-161-749-00 CAP CFRAMIC 0.01MF 125V (US)		Q311 Q312 Q401 Q402	8-8-
C401 A-1-123-316-00 ELECT 10MF 250V(UK, AEP, E) C401 A-1-123-316-00 ELECT 10MF 20% 16V C406 A-1-123-316-00 ELECT 10MF 20% 16V		Q403 Q404 Q405 Q406 Q407	8- 8- 8- 8-
D301 A.1+806-233-00 DIODE (BRIDGE) KBPC802 D302 8-719-191-07 DIODE RD9.1E-B D303 A.8-719-200-02 DIODE 10E-2 D304 8-719-110-07 DIODE RD10E-B D305 A.8-719-200-02 DIODE 10E-2	4	Q408 Q409 Q410 Q501	8- 8- 8-
D306 A.8-/19-200-02 D10DE 10E-2 D307 8-719-815-55 D10DE 1S1555 D401 8-719-815-55 D10DE 1S1555 .		Q801 Q802 Q803	8- 8-
D402 8-719-815-55 DIODE 1S1555 D403 8-719-815-55 DIODE 1S1555	1	QOOJ R156 <b>∧.</b>	
D404 8-719-815-55 D10DE 1S1555 D501 8-719-200-02 D10DE 10E-2 D502 8-719-200-02 D10DE 10E-2 D503 8-719-200-02 D10DE 10E-2		R157 Å. R158 Å. R256 Å. R257 Å.	.1- 1- 1-
D601 8-719-900-92 DIODE GL-9PR20	R	R258 <u>A</u> . R303 <u>A</u> .	1-2 1-2

#### ELECTRICAL PARTS

	Ref.No.	Part No.	Description	
	D602 D603		DIODE GL-9PR20 DIODE GL-9NG2	
	IC101 IC201 IC301 IC401	8-759-313-96 8-759-745-60	5 IC HA1396 1 IC NJM4560D	
	J701 J801	1-507-648-00 1-507-745-00		
	PL	1-518-313-00	LAMP, PILOT	
	Q101 Q102 Q103 Q104 Q105	8-729-334-58 8-729-334-58 8-729-100-13 8-729-663-47 8-729-663-47	TRANSISTOR 2SC1345 TRANSISTOR 2SC2001 TRANSISTOR 2SC1364	
	Q201 Q202 Q203 Q204 Q205	8-729-334-58 8-729-334-58 8-729-100-13 8-729-663-47 8-729-663-47	TRANSISTOR 2SC1345 TRANSISTOR 2SC2001 TRANSISTOR 2SC1364	
	Q301 Q302 Q303 Q304 Q305	8-729-180-93 8-729-663-47 8-729-180-93 8-729-180-93 8-729-180-93	TRANSISTOR 2SD809 TRANSISTOR 2SC1364 TRANSISTOR 2SD809 TRANSISTOR 2SD809 TRANSISTOR 2SD809	
	Q306 Q311 Q312 Q401 Q402	8-729-663-47 8-729-612-77 8-729-663-47 8-729-663-47 8-729-880-82	TRANSISTOR 2SC1364 TRANSISTOR 2SA1027R TRANSISTOR 2SC1364 TRANSISTOR 2SC1364 TRANSISTOR 2SB808	
,E)	Q403 Q404 Q405 Q406 Q407	8-729-880-82 8-729-801-22 8-729-801-22 8-729-113-34 8-729-177-32	TRANSISTOR 2SB808 TRANSISTOR 2SD1012 TRANSISTOR 2SD1012 TRANSISTOR 2SB733 TRANSISTOR 2SD773	
	Q408 Q409 Q410 Q501 Q801	8-729-663-47 8-729-612-77 8-729-663-47 8-729-663-47 8-729-334-58	TRANSISTOR 2SC1364 TRANSISTOR 2SA1027R TRANSISTOR 2SC1364 TRANSISTOR 2SC1364 TRANSISTOR 2SC1345	
	Q802 Q803	8-729-334-58 8-729-101-02	TRANSISTOR 2SC1345 TRANSISTOR PH102	
	R157 A. R158 A. R256 A.	1-212-946-00 1-212-946-00 1-247-186-00 1-212-946-00 1-212-946-00	FUSIBLE 3.3 5% 1/2W F FUSIBLE 3.3 5% 1/2W F CARBON 3.3 5% 1/2W F FUSIBLE 3.3 5% 1/2W F FUSIBLE 3.3 5% 1/2W F	THE PROPERTY OF THE PARTY OF TH
	R303 ⚠.	1-217-381-00	CARBON 3.3 5% 1/2W F FUSIBLE 3.3 5% 1/4W F FUSIBLE 1.5 5% 1/2W F	No. of the last of

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All capacitors are in  $\mu F$ . Common capacitors are omitted. Refer to the following lists for their part numbers. MF: $\mu F$ , PF: $\mu \mu F$ .

#### RESISTORS

- All resistors are in ohms. Common 1/4W, 1/8W and 1/16W carbon resistors are omitted. Refer to the following lists for their part numbers.
- · F : nonflammable

The components identified by shading and mark A are critical for safety.

Replace only with part number specified.

## COILS

· MMH : mH, UH : µH

## ELECTRICAL PARTS

Ref.No.	Part No.	Description
RV302	1-226-430-00 1-226-430-00 1-228-263-00 1-228-278-00 1-228-277-00	RES, ADJ, CARBON 5K RES, ADJ, CARBON 5K RES, VAR, CARBON 100K/100K(VOLUME) RES, VAR, CARBON 100K/100K(BALANCE) RES, VAR, CARBON 100K/100K(BASS)
RV304 RV801	1-228-277-00 1-228-264-00	RES, VAR, CARBON 100K/100K(TREBLE) RES, VAR, CARBON 10K (MIC MIX)
\$302 <u>A</u> \$302 <u>A</u> \$303 <u>A</u>	.1-553-318-00	SWITCH, PUSH SWITCH, PUSH (AC POWER)(US) SWITCH, PUSH (AC POWER)(UK,AEP,E) SWITCH, MICRO SWITCH, PUSH
\$901 \$902 \$903 \$904	1-553-739-00 1-553-739-00 1-553-739-00 1-553-739-00	SWITCH, KEY BOARD SWITCH, KEY BOARD SWITCH, KEY BOARD SWITCH, KEY BOARD
T301 <b>∆</b> .	.1-446-987-00 .1-446-988-00 .1-446-989-00	TRANSFORMER, POWER(US) TRANSFORMER, POWER(AEP,UK) TRANSFORMER, POWER(E)

- NOTE:

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- Due to standardization, parts with part numbers  $(\Delta-\Delta\Delta\Delta-\Delta\Delta\Delta-XX)$  or  $\Delta-\Delta\Delta\Delta\Delta-\Delta\Delta\Delta-X)$  may be different from those used in the set.

CAPACITORS: All capacitors are in  $\mu F$ . Common capacitors are omitted. Refer to the following lists for their part numbers. MF:  $\mu F$ , PF:  $\mu \mu F$ .

- RESISTORS
  All resistors are in ohms. Common 1/4W, 1/8W and 1/16W carbon resistors are omitted. Refer to the following lists for their part numbers.
- · F : nonflammable

The components identified by shading and mark ⚠are critical for safety.
Replace only with part number specified.

COILS

· MMH : mH, UH : µН

## ELECTROLYTIC CAPACITORS

			RATING		→: Use the high volt	tage rated one.
CAP. (µF)	6.3 VOLT.	10 VOLT.	16 VOLT.	25 VOLT.	35 VOLT.	50 VOLT.
CAF. (µF)	PART No.	PART No.				
0.47					<b>→</b>	1-121-726-00
1.0	1				-	1-121-391-00
2.2					→	1-121-450-00
3.3	→	<b>→</b>	→	1-121-392-00	<b>→</b>	1-121-393-00
4.7	<b>→</b>	<b>→</b>		1-121-395-00	→	1-121-396-00
10	<b>→</b>	<b>→</b>	1-121-651-00	1-121-398-00		1-121-738-00
22	→		1-121-479-00	1-121-480-00	1-121-662-00	1-121-152-00
33	→ .	>	1-121-403-00	1-121-404-00	1-121-652-00	1-121-405-00
47	→	1-121-352-00	1-121-409-00	1-121-410-00	1-121-653-00	1-121-411-00
100	→	1-121-414-00	1-121-415-00	1-121-416-00	1-121-357-00	1-121-417-00
220	1-121-419-00	1-121-420-00	1-121-421-00	1-121-422-00	1-121-261-00	1-121-423-00
330	1-121-751-00	1-121-805-00	1-121-521-00	1-121-654-00	1-121-655-00	1-121-656-00
470	1-121-424-00	1-121-425-00	1-121-426-00	1-121-733-00	1-121-361-00	1-121-810-00
1000	-	1-121-736-00	1-121-245-00	1-121-657-00	1-121-388-00	1-123-061-00
2200	1-121-658-00	1-121-659-00	1-121-660-00	1-123-067-00	1-121-984-00	_
3300	1-121-661-00	1-123-075-00	1-123-071-00	_		

CAP. (µF)	100 VOLT.	160 VOLT.	250 VOLT.	350 VOLT.	
CAP. (µP)	PART No.	PART No.	PART No.	PART No.	
0.47		_		ion	
1.0	1-123-249-00	1-123-252-00	1-123-003-00	1-121-168-00	
2.2	1-123-250-00	1-123-026-00		1-123-028-00	
3.3	1-121-995-00	_	1-123-004-00	1-123-006-00	
4.7	1-123-255-00	1-121-246-00	1-121-759-00	1-123-007-00	
10	1-121-126-00	1-121-999-00	1-123-254-00	1-123-008-00	
22	1-121-996-00	1-123-253-00	1-123-005-00	1-123-022-00	
33	1-121-997-00	1-121-757-00	-	_	
47	1-123-251-00	1-121-919-00	_	_	
100	1-123-084-00	_	_	_	

## CERAMIC CAPACITORS

			RAT	ring			
CAP. (pF)	50 VOLT.	CAP. (pF)	50 VOLT.	CAP, (pF)	50 VOLT.	040 (5)	50 VOLT.
CAF, (PF)	PART No.	CAP. (pr)	PART No.	CAP, (pr)	PART No.	CAP. (μF)	PART No.
0.5	1-101-837-00	22	1-102-959-00	150	1-101-361-00	0.001	1-102-074-0
0.75	1-101-586-00	24	1-102-960-00	160	1-101-367-00	0.0012	1-102-118-0
1.0	1-102-934-00	27	1-102-961-00	180	1-102-976-00	0.0015	1-102-119-0
1.5	1-101-576-00	30	1-102-962-00	200	1-102-977-00	0.0018	1-102-120-0
2.0	1-102-935-00	33	- 1-102-963-00	220	1-102-978-00	0.0022	1-102-121-0
3	1-102-936-00	36	1-102-964-00	240	1-102-979-00	0.0027	1-102-122-0
4	1-102-937-00	39	1-102-965-00	270	1-102-980-00	0.0033	1-102-123-0
5	1-102-942-00	43	1-102-966-00	300	1-102-981-00	0.0039	1-102-124-0
6	1-102-943-00	47	1-101-880-00	330	1-102-820-00	0.0047	1-102-125-0
7	1-102-944-00	51	1-101-882-00	360	1-102-821-00	0.0056	1-102-126-0
8	1-102-945-00	56.	1-101-884-00	390	1-102-822-00	0.0068	1-102-127-00
9	1-102-946-00	62	1-101-886-00	430	1-102-823-00	0.0082	1-102-128-00
10	1-102-947-00	68	1-101-888-00	470	1-102-824-00	0.01	1-102-129-00
11	1-102-948-00	75	1-101-890-00	510	1-101-059-00	0.022	1-101-005-0
12	1-102-949-00	82	1-102-971-00	560	1-102-115-00	0.047	1-101-006-00
13	1-102-950-00	91	1-102-972-00	680	1-102-116-00		
15	1-102-951-00	100	1-102-973-00	820	1-102-117-00	ľ	
16	1-102-952-00	110	1-102-815-00				
18	1-102-953-00	120	1-102-816-00		. 1		
20	1-102-958-00	130	1-101-081-00				

#### CERAMIC (SEMICONDUCTOR) CAPACITORS

		. R.	ATING -	: Use the high vo	Itage rated one.	
CAP. (µF)	25 VOLT. 50 VOLT.		040 (45)	25 VOLT.	50 VOLT.	
CAP. (µP)	PART No.	PART No.	CAP. (µF)	PART No.	PART No.	
0.001	→	1-161-039-00	0.018	1-161-016-00	1-161-054-00	
0.0012	→	1-161-040-00	0.022	1-161-017-00	1-161-055-00	
0.0015		1-161-041-00	0.027	1-161-018-00	1-161-056-00	
0.0018		1-161-042-00	0.033	1-161-019-00	1-161-057-00	
0.0022		1-161-043-00	0.039	1-161-010-00	1-161-058-00	
0.0027	<b>↑</b>	1-161-044-00	0.047	1-161-021-00	1-161-059-00	
0.0033	. v <del></del>	1-161-045-00	0.056		1-161-060-00	
0.0039	<b>→</b>	1-161-046-00	0.068		1-161-061-00	
0.0047		1-161-047-00	0.082	1-161-024-00	1-161-062-00	
0.0056	→	1-161-048-00	0.1	1-161-025-00	1-161-063-00	
0.0068	<b>→</b>	1-161-049-00				
0.0082	1-161-012-00	1-161-050-00			.0	
0.01	1-161-013-00	1-161-051-00				
0.012		1-161-052-00				
0.015	1-161-015-00	1-161-053-00		· ·		

## MYLAR CAPACITORS

	RATING											
/>	50 VOLT.	100 VOLT.	200 VOLT.	OAD (E)	50 VOLT.	100 VOLT.	VOLT. 200 VOLT.	040 (	50 VOLT.	100 VOLT.	200 VOLT.	
CAP. (µF)	PART No.	PART No.	PART No.	CAP. (µF)	PART No.	PART No.	PART No.	CAP. (µF)	PART No.	PART No.	PART No.	
0.001	1-108-227-00	1-108-365-00	1-108-409-00	0.01	1-108-239-00	1-108-377-00	1-108-421-00	0.1	1-108-251-00	1-108-389-00	1-108-433-00	
0.0012	1-108-351-00	1-108-366-00	1-108-410-00	0.012	1-108-357-00	1-108-378-00	1-108-422-00	0.12	1-108-363-00	1-108-390-00	1-108-434-00	
0.0015	1-108-228-00	1-108-367-00	1-108-411-00	0.015	1-108-240-00	1-108-379-00	1-108-423-00	0.15	1-108-252-00	1-108-391-00	1-108-435-00	
0.0018	1-108-352-00	1-108-368-00	1-108-412-00	0.018	1-108-358-00	1-108-380-00	1-108-424-00	0.18	1-108-364-00	1-108-392-00	1-108-436-00	
0.0022	1-108-230-00	1-108-369-00	1-108-413-00	0.022	1-108-242-00	1-108-381-00	1-108-425-00	0.22	1-108-254-00	1-108-393-00	1-108-437-00	
0.0027	1-108-353-00	1-108-370-00	1-108-414-00	0.027	1-108-359-00	1-108-382-00	1-108-426-00	0.27	1-108-854-00		_	
0.0033	1-108-232-00	1-108-371-00	1-108-415-00	0.033	1-108-244-00	1-108-383-00	1-108-427-00	0.33	1-108-855-00		_	
0.0039	1-108-354-00	1-108-372-00	1-108-416-00	0.039	1-108-360-00	1-108-384-00	1-108-428-00	0.39	1-108-856-00	-		
0.0047	1-108-234-00	1-108-373-00	1-108-417-00	0.047	1-108-246-00	1-108-385-00	1-108-429-00	0.47	1-108-857-00		_	
0.0056	1-108-355-00	1-108-374-00	1-108-418-00	0.056	1-108-361-00	1-108-386-00	1-108-430-00					
0.0068	1-108-237-00	1-108-375-00	1-108-419-00	0.068	1-108-249-00	1-108-387-00	1-108-431-00					
0.0082	1-108-356-00	1-108-376-00	1-108-420-00	0.082	1-108-362-00	1-108-388-00	1-108-432-00					



			RATING	<b>→</b> :	Use the high voltag	e rated one.	
CAD (E)	3.15 VOLT.	6.3 VOLT.	10 VOLT.	16 VOLT.	20 VOLT.	25 VOLT.	35 VOLT.
CAP. (µF)	PART No.	PART No.	PART No.				
0.01					<b>→</b>	· →	1-131-396-00
0.015	17					→	1-131-397-00
0.022						→	1-131-398-00
0.033						>	1-131-399-00
0.047						>	1-131-400-00
0.068				1	>	->	1-131-401-00
0.1							1-131-402-00
0.15					>	→	1-131-403-00
0.22					<b>-→</b>	>	1-131-404-00
0.33					→	1-131-409-00	1-131-405-00
0.47	_	-	-	-	1-131-412-00	-	1-131-406-00
0.68	-	_	_	1-131-415-00		1-131-410-00	1-131-407-00
1.0		-	1-131-418-00	_	1-131-413-00	→	1-131-408-00
1.5		1-131-421-00	-	1-131-416-00	→	1-131-411-00	1-131-348-00
2.2	1-131-424-00	-	1-131-419-00	-	1-131-414-00	1-131-355-00	1-131-349-00
3.3		1-131-422-00	-	1-131-417-00	1-131-362-00	1-131-356-00	1-131-350-00
4.7	1-131-425-00	_	1-131-420-00	1-131-369-00	1-131-363-00	1-131-357-00	1-131-351-00
6.8		1-131-423-00	1-131-376-00	1-131-370-00	1-131-364-00	1-131-358-00	1-131-352-00
10	1-131-426-00	1-131-383-00	1-131-377-00	1-131-371-00	1-131-365-00	1-131-359-00	1-131-353-00
15	1-131-390-00	1-131-384-00	1-131-378-00	1-131-372-00	1-131-366-00	1-131-360-00	_
22	1-131-391-00	1-131-385-00	1-131-379-00	1-131-373-00	1-131-367-00	1 .	
33	1-131-392-00	1-131-386-00	1-131-380-00	1-131-374-00			
47	1-131-393-00	1-131-387-00	1-131-381-00	_			
68	1-131-394-00	1-131-388-00	- '	_			
100	1-131-395-00		_				

# TANTALUM CAPACITORS

9-950-602-11

RATING						
CAP. (μF)	3 VOLT. PART No.	6.3 VOLT. PART No.	10 VOLT. PART No.	16 VOLT. PART No.	20 VOLT. PART No.	35 VOLT. PART No.
0.047						1-131-274-00
0.068						1-131-275-00
0.1						1-131-276-00
0.15						1-131-277-00
0.22		1	_		1-131-262-00	1-131-278-00
0.33	,	*	_	_	1-131-263-00	1-131-279-00
0.47			1-131-169-00	_	1-131-264-00	1-131-280-00
0.68				1-131-258-00	1-131-265-00	1-131-281-00
1.0			1-131-254-00	-	1-131-266-00	1-131-282-00
1,5		1-131-250-00	-	704	1-131-267-00	1-131-283-00
2.2		-	-	1-131-259-00	1-131-268-00	1-131-284-00
3.3		_	1-131-255-00	_	1-131-269-00	_
4.7		1-131-251-00	1-131-171-00	_	1-131-270-00	-
6.8		. –		1-131-260-00	1-131-271-00	_
10	-	-	1-131-256-00	-	1-131-272-00	_
15	- '	1-131-252-00	_	1-131-261-00		1
22		_	1-131-257-00	_	. '	1
33	1-131-176-00	1-131-253-00	1-131-173-00	_		
47	1-131-288-00	1-131-174-00	_	_		
100	1-131-177-00					

## **Sony Corporation**